



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re the Application of: Michael K. BRAND et al.  
Group Art Unit: 2128  
Application No.: 09/557,672  
Examiner: Thai Q. PHAN  
Filed: April 25, 2000  
For: METHOD FOR ESTIMATING CHANGES IN PRODUCT  
LIFE FOR A REDESIGNED PRODUCT

INFORMATION DISCLOSURE STATEMENT

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

Pursuant to 37 CFR § 1.56, the attention of the Patent and Trademark Office is hereby directed to the reference(s) listed on the attached PTO-1449. Unless otherwise indicated herein, one copy of each reference is attached. It is respectfully requested that the information be expressly considered during the prosecution of this application, and that the reference(s) be made of record therein and appear among the "References Cited" on any patent to issue therefrom. The filing of this Information Disclosure Statement and the enclosed PTO Form No. 1449, shall not be construed as an admission that the information cited is prior art, or is considered to be material to patentability as defined in 37 C.F.R. § 1.56(b). The paragraphs marked below are applicable. It is believed that no fees other than those indicated below are due, but authorization is hereby given to charge any additional fees due, or to credit any overpayment, to deposit account 11-0600.

☐ 1. This Information Disclosure Statement is being filed (a) within three months of the filing date of a national application other than a continued prosecution application under 37 C.F.R. §1.53(d), (b) within three months of the date of entry of the national stage as set forth in 37 C.F.R. § 1.491 in an international application, (c) before the mailing date of a first Office Action on the merits in the present application, OR (d) before the mailing of a first office action after filing of a request for continued examination. No certification or fee is required.

☒ 2. This Information Disclosure Statement is being filed more than three months after the U.S. filing date AND after the mailing date of the first Office Action on

the merits, but before the mailing date of a final action, Notice of Allowance, or any action that otherwise closes prosecution.

- ☐ a. I hereby certify that each item of information contained in this Information Disclosure Statement was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this Information Disclosure Statement. 37 CFR §1.97(e)(1).
- ☐ b. I hereby certify that no item of information in this Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart foreign application, and, to my knowledge after making reasonable inquiry, was known to any individual designated in 37 CFR §1.56(c) more than three months prior to the filing of this Information Disclosure Statement. 37 CFR §1.97(e)(2).
- ☐ c. Please debit Deposit Account No. 11-0600 in the amount of \$180.00 in payment of the fee under 37 CFR §1.17(p) to ensure consideration of the disclosed information. Two duplicate copies of this paper are attached. 37 CFR §1.97(c)(2).
- ☐ 3. This Information Disclosure Statement is being filed after the mailing date of a final action, Notice of Allowance or an action that otherwise closes prosecution, but before payment of the Issue Fee. Applicant(s) hereby request(s) that the Information Disclosure Statement be considered. Please debit Deposit Account No. 11-0600 in the amount of \$180.00 in payment of the petition fee under 37 CFR §1.17(p) to ensure consideration of the disclosed information. Two duplicate copies of this paper are attached.
- ☐ a. I hereby certify that each item of information contained in this Information Disclosure Statement was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this Information Disclosure Statement. 37 CFR §1.97(e)(1).
- ☐ b. I hereby certify that no item of information in this Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart foreign application, and, to my knowledge after making reasonable inquiry, was known to any individual designated in 37 CFR §1.56(c) more than three months prior to the filing of this Information Disclosure Statement. 37 CFR §1.97(e)(2).
- ☐ 4. Relevance of the non-English language reference(s) is discussed in the present specification.
- ☐ 5. The reference(s) was/were cited in a counterpart foreign application. An English language version of the foreign search report is attached for the Examiner's information.

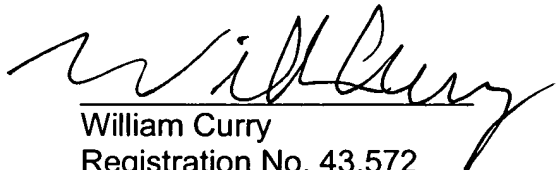
- ☐ 6. A concise explanation of the relevance of the non-English language reference(s) appears in the Appendix attached hereto.
- ☒ 7. The Examiner's attention is directed to co-pending U.S. Patent Application No. 09/900,779 filed July 6, 2001, which is directed to related technical subject matter. The attached form 1449 lists references cited in an Office Action mailed January 10, 2005 in the foregoing application.
- ☐ This application is one of a series of related applications, identified in the attached Appendix, which are directed to related technical subject matter. The identification of those U.S. Patent Applications is not to be construed as a waiver of secrecy as to those applications now or upon issuance of the present application as a patent. The Examiner is respectfully requested to consider the cited applications and the art cited therein during the examination.
- ☐ 9. The reference(s) was/were cited by or submitted to the Office in parent application No. \_\_\_\_\_, filed \_\_\_\_\_, which is relied upon for an earlier filing date under 35 U.S.C. §120. Thus, copies of these references are not attached. 37 CFR §1.98(d).
- ☐ 10. English-language Abstracts of the non-English language references are attached hereto.

Respectfully submitted,

KENYON & KENYON

Date:

APRIL 11, 2005

  
William Curry

Registration No. 43,572

Kenyon & Kenyon  
1500 K Street, N.W. – Suite 700  
Washington, D.C. 20005-1257  
Tel: 202-220-4200  
Fax: 202-220-4201

FORM PTO-1449  
INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT(S)



Atty Docket No. : 12177/13401  
Serial No. : 09/557,672  
Inventors : Michael K. BRAND et al.  
Filed : April 25, 2000  
Group Art Unit : 2128  
Examiner : Thai Q. PHAN

U.S. PATENT DOCUMENTS

<u>Examiner Initial</u>	<u>Patent Number</u>	<u>Issue Date</u>	<u>Inventor(s)</u>
_____	6,816,813	11-2004	Tan et al.
_____	6,684,349	1-2004	Gullo et al.

OTHER DOCUMENTS

<u>Examiner Initial</u>	
_____	Analog Device's Reliability Handbook. pp. 1-23 out of 88 pages. copyright 2000.
_____	Military Standard MIL-STD-690C. March 26, 1993.
_____	Hobbs, Gregg. "What HALT and HASS Can Do For Your Products". copyright 1997, Nelson Publishing
_____	Wiesling, Paul. "Advance Program 1 <sup>st</sup> IEEE/CPMT 2-day Workshop on Accelerated Stress Testing, Sept. 7-8, 1995" Aug. 28, 1995.
_____	Linear Technology, "Reliability Assurance Program", especially p. 11. Undated. <a href="http://www.linear.com/company/quality/RAPweb.pdf">www.linear.com/company/quality/RAPweb.pdf</a> . Printed by Examiner on 12/27/04.

EXAMINER SIGNATURE

DATE CONSIDERED

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

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\_\_\_\_\_ McLean, Harry. "A Statistical Approach for the Disposition of HALT Issues." Feb. 15, 2001.

\_\_\_\_\_ Prakash, Simon. "The Application of HALT and HASS Principles in a High Volume Manufacturing Environment." Qual. Reliab. Engng. Int., Vol. 14, pp. 385-392, copyright 1998.

\_\_\_\_\_ Confer, R. et al. "Use of Highly Accelerated Life Test (HALT) to Determine Reliability of Multilayer Ceramic Capacitors." Proc. 41<sup>st</sup> Electronic Components and Technology Conf., 1991. pp. 320-322

\_\_\_\_\_ Gera, A. E. "The Modified Exponentiated Weibull Distribution for Life-Time Modeling." Proc. Annual Reliability and Maintainability Symposium, Jan. 16, 1997. pp. 149-152.

\_\_\_\_\_ Kim, J.S. "A Test of the Exponential MTBF and Comparison of Power Functions of the Random Censoring Case." IEEE Transactions on Reliability. April 1988. pp. 103-107.

\_\_\_\_\_ Mudholkar, G.S. et al. "Exponentiated Weibull Family for Analyzing Bathtub Failure-Rate Data." IEEE Transactions on Reliability. June 1993. pp. 299-302. *(copy not provided by examiner)*

\_\_\_\_\_ Upadhyayula, K. et al. "Guidelines for Physics-of-Failure Based Accelerated Stress Testing." Proc. Annual Reliability and Maintainability Symposium. Jan. 22, 1998. pp. 345-357. *(copy not provided by examiner)*

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Scalise, J. "Plastic Encapsulated Microcircuits (PEM) Qualification Testing." 46<sup>th</sup> Electronic Components and Technology Conference, 1996. May 31, 1996. pp. 392-397.

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